What is claimed is:

1. A condenser system for use with a camera to collect and image radiation to a mask comprising:

a source of radiation; and

at least one collector mirror facing the source of radiation wherein the at least one collector mirror comprises a substrate, an underlying reflective surface, and an upper sacrificial reflective surface.

2. The condenser system of claim 1 wherein the at least one collector mirror does not include a passivating overcoat.

3. The condenser system of claim 1 wherein the source of radiation is a laser plasma source.

4. The condenser system of claim 1 wherein the source of radiation generates EUV radiation.

5. The condenser system of claim 4 wherein the underlying reflective surface has a normal incidence reflectivity of at least about 30% of the EUV radiation.

6. The condenser system of claim 1 wherein the underlying reflective surface comprises a first multilayer film that is deposited on a surface of the substrate and wherein the sacrificial reflective surface is a second multilayer film that is deposited on a surface of the underlying reflective surface.

7. The condenser system of claim 6 wherein (i) the first multilayer film comprises alternating layers of first material having a first refractive index and a second material having a second refractive index that is larger than that of the first material and (ii) the second multilayer film comprises alternating layers of third material having a third refractive index and a fourth material having a fourth refractive index that is larger than that of the third material.

8. The condenser system of claim 7 wherein the first multilayer film comprises about 20 to 80 layer pairs and the second multilayer film comprises about 100% to 400% layer pairs.

9. The condenser system of claim 8 wherein the first multilayer film has a periodicity of about 5 nm to 30 nm and the second multilayer film has a periodicity of about 5 nm to 30 nm.

10. The condenser system of claim 6 wherein the first multilayer film comprises alternating layers of molybdenum and silicon and the second multilayer film comprises alternating layers of molybdenum and silicon.

11. The condenser system of claim 10 wherein the source of radiation generates EUV radiation.

12. The condenser system of claim 1 wherein the system is for use with a ringfield camera and wherein the at least one collector mirror comprises at least two substantially equal radial segments of a parent aspheric mirror, each having one focus at the radiation source and a curved line focus filling the object field of the camera at the radius of the ringfield and each producing a beam of radiation.

13. The condenser system of claim 12 further comprising:

a corresponding number of sets of correcting mirror means which are capable of translation or rotation, or both, such that all of the beams of radiation pass through the entrance pupil of the camera and form a coincident arc image at the ringfield radius, wherein at least one of the correcting mirrors of each set, or a mirror that is common to said sets of mirrors, from which the radiation emanates, is a concave relay mirror that is positioned to shape a beam segment having a chord angle of about 25 to 85 degrees into a second beam segment having a chord angle of about 0 to 60 degrees, wherein the distance from the collector mirrors to the concave relay mirror is equal to 3 to 10 times the

distance from the concave relay mirror to the mask.

14. The condenser system of claim 13 wherein the at least one collector mirror comprises six substantially equal radial segments of a parent aspheric mirror.

15. A condenser system having a set of mirrors for collecting extreme ultra-violet (EUV) radiation from a radiation source that forms a source image and having correcting mirrors which are capable of translating or rotating, or both, one or more beams from said set of mirrors and are capable of modifying the convergence of the one or more beams or the size of the source image, or both, and wherein the system includes at least one collector mirror facing a source of EUV radiation wherein the at least one collector mirror comprises a substrate, an underlying reflective surface, and an upper sacrificial reflective surface.

16. The condenser system of claim 15 wherein the at least one collector mirror does not include a passivating overcoat.

17. The condenser system of claim 15 wherein the radiation source is a laser plasma source.

18. The condenser system of claim 15 wherein the underlying reflective surface has a normal incidence reflectivity of at least about 30% of the EUV radiation.

19. The condenser system of claim 15 wherein the underlying reflective surface comprises a first multilayer film that is deposited on a surface of the substrate and wherein the sacrificial reflective surface is a second multilayer film that is deposited on a surface of the underlying reflective surface.

20. The condenser system of claim 19 wherein (i) the first multilayer film comprises alternating layers of first material having a first refractive index and a second material having a second refractive index that is larger than that of the first material and (ii) the

second multilayer film comprises alternating layers of third material having a third refractive index and a fourth material having a fourth refractive index that is larger than that of the third material.

21. The condenser system of claim 20 wherein the first multilayer film comprises about 20 to 80 layer pairs and the second multilayer film comprises about 100 to 400 layer pairs.

22. The condenser system of claim 21 wherein the first multilayer film has a periodicity of about 5 nm to 30 nm and the second multilayer film has a periodicity of about 5 nm to 30 nm.

23. The condenser system of claim 19 wherein the first multilayer film comprises alternating layers of molybdenum and silicon and the second multilayer film comprises alternating layers of molybdenum and silicon.

24. A method of preparing a collector mirror of a condenser system for collecting radiation of a selected wavelength from a source of radiation that comprises the steps of:

(a) depositing a first multilayer film on a substrate such that the film achieves a desired reflectance with respect to a first radiation light having a first wavelength; and

(b) depositing a second multilayer film on the first multilayer film, wherein the second multiplayer film also reflects the first radiation light.

25. The method of claim 24 wherein the first multilayer film comprises an underlying reflective surface and wherein the second multilayer film comprises an upper sacrificial reflective surface.

26. The method of claim 24 wherein the collector mirror does not include a passivating overcoat.

27. The method of claim 24 wherein step (a) comprises depositing a first multilayer film on a substrate such that the film achieves a reflectance of at least 30% with respect to the first radiation light.

28. The method of claim 24 wherein the first radiation light is EUV radiation.

29. The method of claim 28 wherein the first multilayer film has a normal incidence reflectivity of at least about 30% of the EUV radiation.

30. The method of claim 28 wherein the second multilayer film has a thickness that is at least 2 times the thickness of the first multilayer film.

31. The method of claim 24 wherein (i) the first multilayer film comprises alternating layers of first material having a first refractive index and a second material having a second refractive index that is larger than that of the first material and (ii) the second multilayer film comprises alternating layers of third material having a third refractive index and a fourth material having a fourth refractive index that is larger than that of the third material.

32. The method of claim 31 wherein the first multilayer film comprises about 20 to 80 layer pairs and the second multilayer film comprises about 100 to 400 layer pairs.

33. The method of claim 32 wherein the first multilayer film has a periodicity of about 5 nm to 30 nm and the second multilayer film has a periodicity of about 5 nm to 30 nm.

34. The method of claim 31 wherein the first multilayer film comprises alternating layers of molybdenum and silicon and the second multilayer film comprises alternating layers of molybdenum and silicon.

35. The method of claim 34 wherein the first radiation light is EUV radiation.

36. The method of claim 24 wherein the collector mirror comprises at least two substantially equal radial segments of a parent aspheric mirror.

37. The method of claim 36 wherein the collector mirror comprises six substantially equal radial segments of a parent aspheric mirror.